Translating Data into Action

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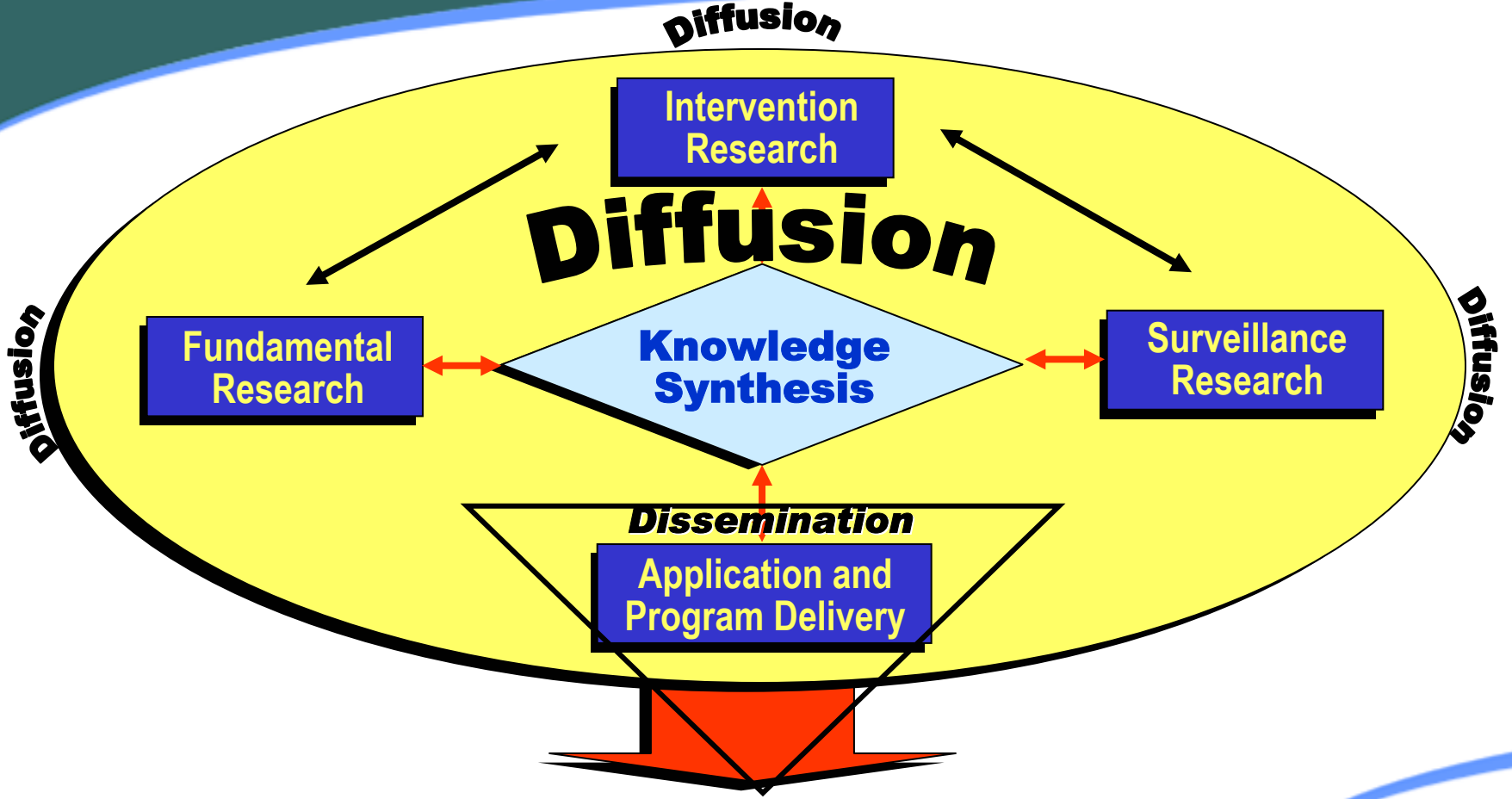
Dynamic Model of Cancer Research & Diffusion and Dissemination



Reducing the cancer burden

Adapted from the Advisory Committee on Cancer Control, National Cancer Institute of Canada, 1994.

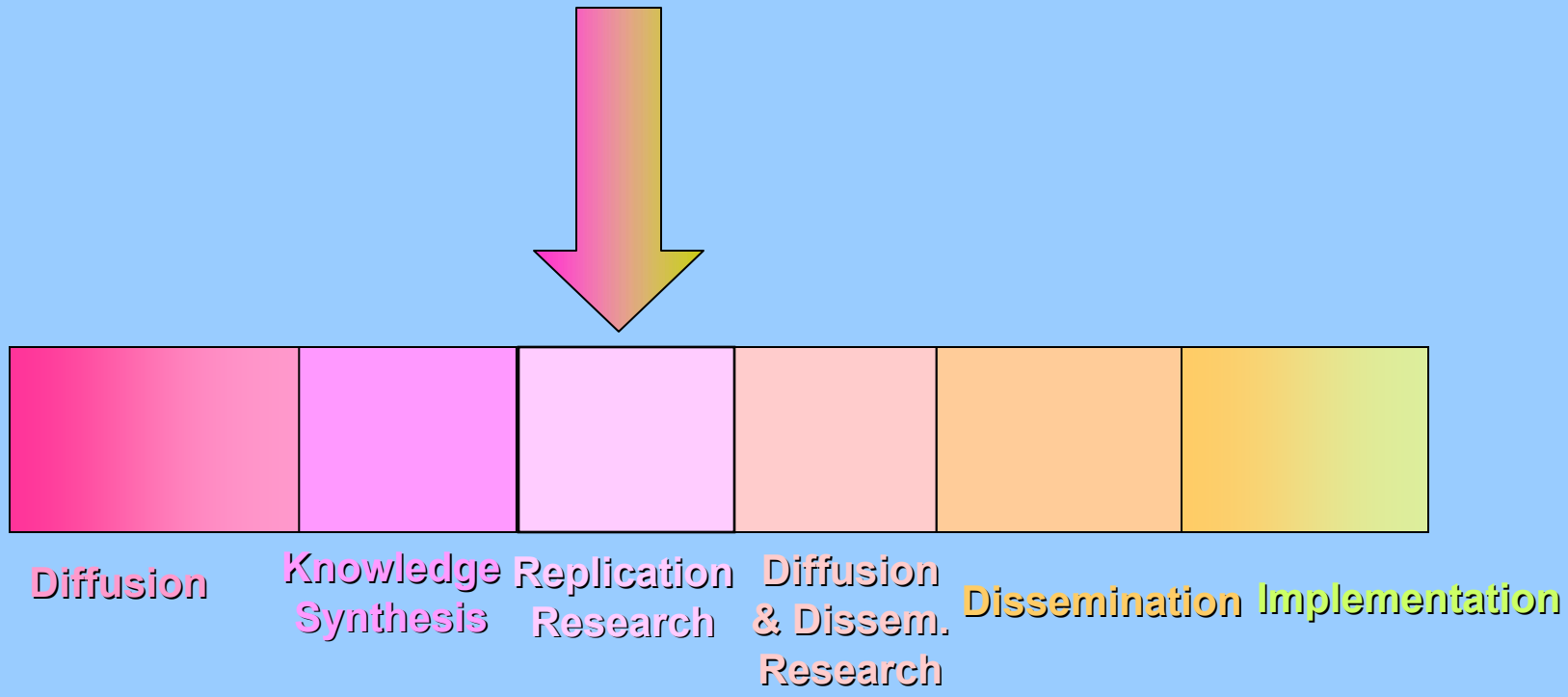
Diffusion

… the passive process by which a growing body of information about an intervention, product, or technology is initially absorbed and acted upon by a small body of highly motivated recipients (Lomas, 1993).

Dissemination

Active process through which target groups are made aware of, receive, accept and use information and other interventions.

THE DISCOVERY-DELIVERY CONTINUUM



Does this apply to Epi & Surveillance Research?

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*T*ranslating *R*esearch into *I*mproved *O*utcomes (*TRIO*)

- Use and communicate cancer and behavioral surveillance data to identify needs, track progress and motivate action.

- Collaboratively develop tools for accessing, and promoting adoption of, evidence-based cancer control interventions.

- Support regional and local partnerships to develop models for identifying infrastructure barriers, expanding capacity and integrating science into comprehensive cancer control planning and implementation.

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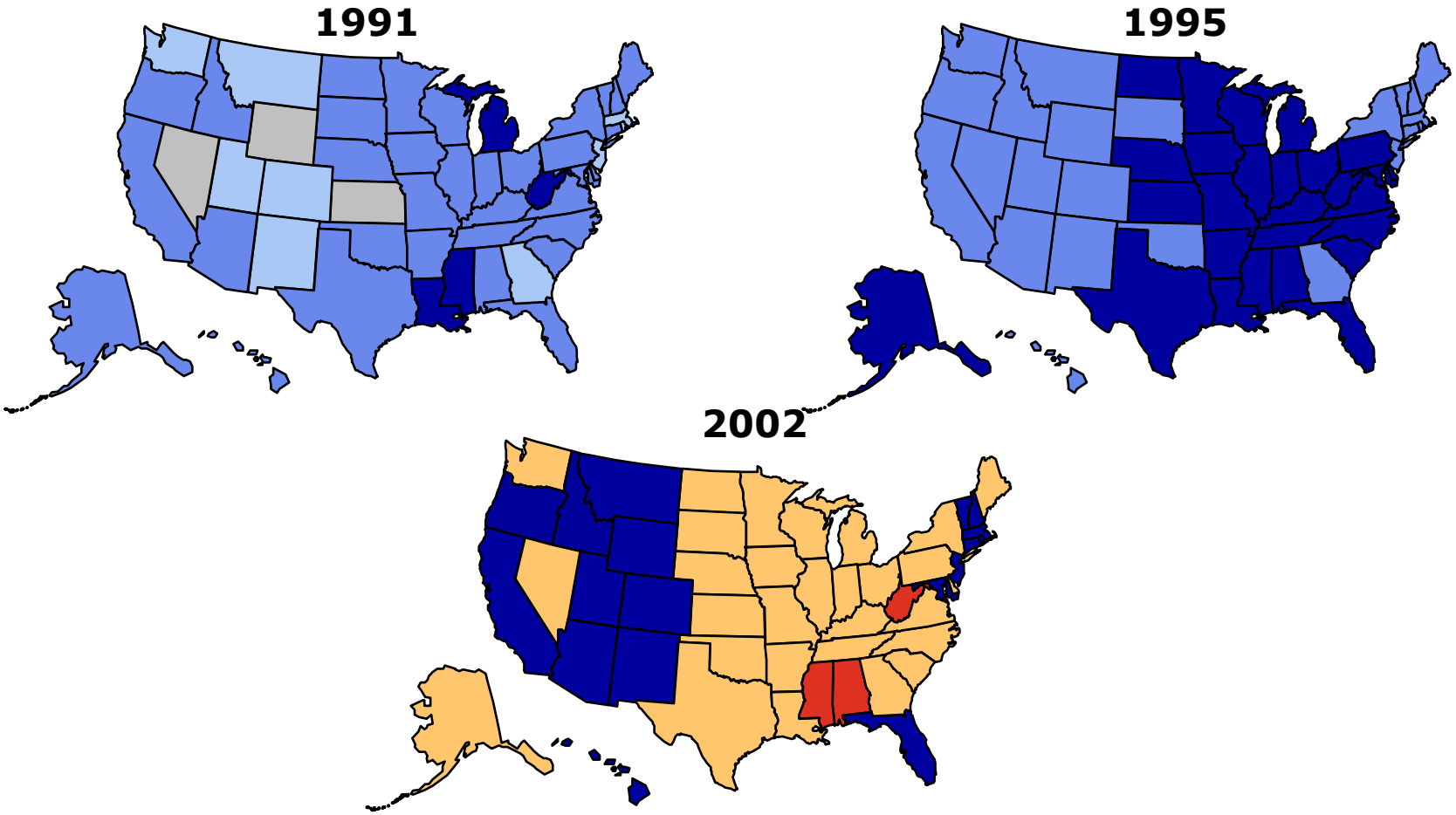
Obesity Trends* Among U.S. Adults

BRFSS, 1991-2002

(*BMI ≥30, or ~ 30 lbs overweight for 5' 4" woman)



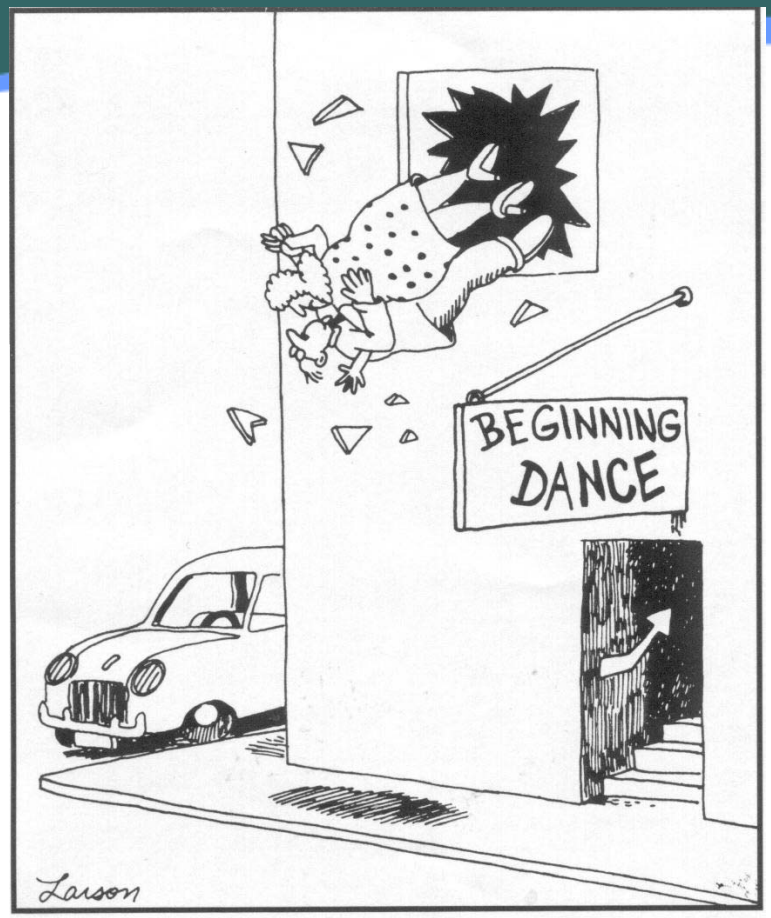
Models for Dissemination

- Knowledge synthesis models
- Grant support models
- Partnership models

Knowledge Synthesis Models

- **Create Knowledge Transfer Teams—Support multidisciplinary (Research & Practice) staff groups whose role is to collectively assess the appropriateness of discoveries for dissemination to different audiences.**

Research-Practice Partnerships?



"Getting a new idea adopted, even when it has obvious advantages, is often very difficult."
-- Everett Rogers, *Diffusion of Innovations*

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Knowledge Synthesis Model: Academic Centers/Funding Agencies

- Encourage Centers to seek training opportunities for people in knowledge synthesis (KS), actively encourage more KS prior to grant application submission and as part of grant application review, more aggressively promote existing knowledge syntheses to academic centers.
- Discourage academic center/funding agency PR departments from promoting the study finding "du jour?"

Health Promotion vs. Self-Promotion

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IARC Monographs Programme on the Evaluation of Carcinogenic Risks to Humans

The IARC Monographs series publishes authoritative independent assessments by international experts of the carcinogenic risks posed to humans by a variety of agents, mixtures and exposures. Since its inception in 1972, the series has reviewed more than 895 agents, and IARC Monographs have become well-known for their thoroughness, accuracy and integrity. The Monographs are invaluable sources of information both for researchers and for national and international authorities.

Certaines données (*) sont également disponibles en français.

- Recently Evaluated and in Preparation*:
  - Vol. 88: Formaldehyde, 2-Butoxyethanol and 1-*tert*-Butoxy-2-propanol (June 2004)
  - Vol. 87: Inorganic and Organic Lead Compounds (February 2004)
  - Vol. 86: Cobalt in Hard-metals and Cobalt Sulfate, Gallium Arsenide, Indium Phosphide and Vanadium Pentoxide (October 2003)
  - Vol. 85: Betel-quid and Areca-nut Chewing and Some Related Nitrosamines (June 2003)
  - Vol. 84: Some Drinking-water Disinfectants and Contaminants, including Arsenic (October 2002)*
- Scheduled for Evaluation at Future Meetings*:
  - Vol. 89: Smokeless Tobacco Products (5-12 October 2004) - Working Group
  - Vol. 90: Human Papillomaviruses (15-22 February 2005)
  - Priority List for Future Evaluations Recommended in February 2003 by the Sixth Advisory Group of the *IARC Monographs* Programme
- Preamble to the Monographs Series*
- Complete List of Agents, Mixtures and Exposures Evaluated and their Classification*
- Complete List of all Monographs and Supplements published to date
- **SEARCH** IARC Agents and Summary Evaluations
- Monographs Recently Published and in Press, and Ordering Information*
- IARC Monographs on CD-ROM and On-line
- Recent Advisory Group Recommendations*
- Directory of Agents Being Tested for Carcinogenicity
- IARC Scientific Publications and IARC Technical Reports Related to IARC Monographs Evaluations
- About the Unit of Carcinogen Identification and Evaluation*

Support For D & D Models

- Grant Support Models—Provide grant and contract support for D&D.
  - Expand supplements for D&D.
  - Support D&D PAs and RFAs.
  - Encourage expanded support for D&D by other funding agencies, e.g. ACS, CDC, RWJF.

D&D Supplements for Epi Grants?

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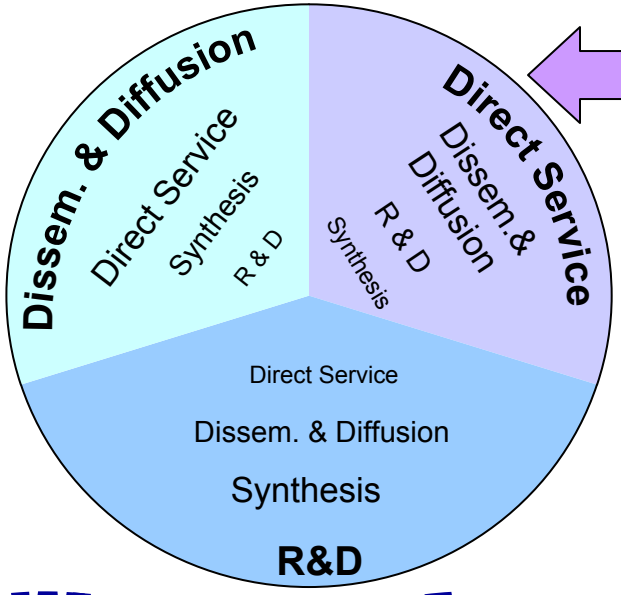
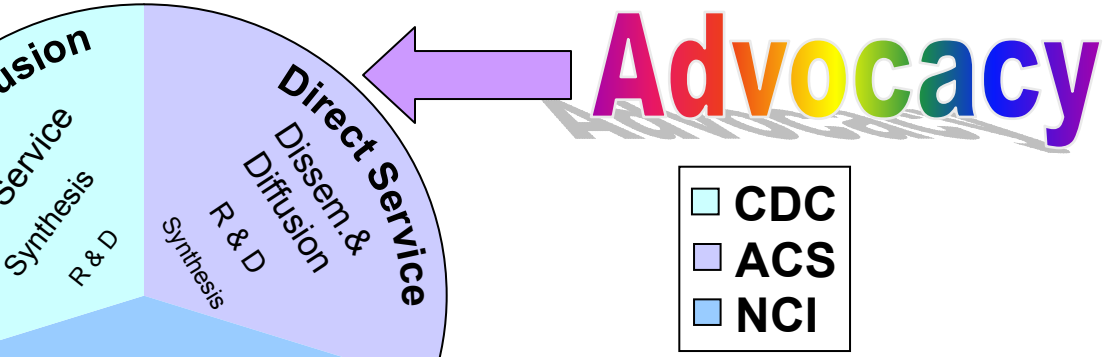
http://cancercontrol.cancer.gov/d4d/

Working Together To Make the Whole Greater Than the Sum of Its Parts

Partnership Model in Comprehensive Cancer Control





Who are the CA partners for moving data into action?

Cancer Control PLANET

Links to resources for comprehensive cancer control

PLANET — Plan, Link, Act, Network with Evidence-based Tools

Follow 5 planning steps to develop cancer control programs ← OR → Find information by cancer control topic

Learn why these steps are important

Step 1 Assess program priorities

- State Cancer Profiles
  (NCI & CDC Web site)
  - Mortality, incidence, screening & risk factors data

Step 2 Identify potential partners

- Regional and state contact information for cancer control partners

Step 3 Determine effectiveness of different intervention approaches

- Guide to Community Preventive Services
  (Federally-sponsored Web site). Example:
  - Increasing cessation (media campaigns, provider reminder systems)
- Guide to Clinical Preventive Services
  (AHRQ-sponsored Web site)
  - Task force recommendations on screening, counseling, and medication regimens.
- Additional Research Evidence Reviews

Step 4 Find research-tested intervention programs and products

- Research-tested Intervention Programs
  (NCI & SAMHSA Web site). Example:
  - "Guía Para Dejar de Fumar" - A Spanish language self-help guide for smokers who want to quit.

Step 5 Plan and evaluate your program

- Guidance for comprehensive cancer control planning (CDC Web site)
  - Guidance for planning and evaluation
- Put Prevention Into Practice
  (AHRQ Web site)

- 5 A Day
- Breast cancer
- Cervical cancer
- Diet
- Physical activity
- Sun safety
- Tobacco control

Coming Soon:

- Colorectal cancer
- Informed decision making for cancer screening

PLANET Sponsors

National Cancer Institute · CDC · American Cancer Society · SAMHSA HHS · AHRQ

Note: This web site is best viewed in Internet Explorer (version 5.0 or higher) o Netscape (version 7.0 or higher) at a screen resolution of 1024 by 768 or more.

We welcome your feedback on the Cancer Control PLANET and its satellite Web sites. To submit feedback, please contact us. Thank you for helping to improve this site for the cancer control community.

http://cancercontrolplanet.cancer.gov

State Cancer Profiles

Dynamic views of cancer statistics for prioritizing cancer control efforts in the nation, states, and counties

Help us improve! Contact us with feedback.

Profiles Home

Quick Profiles

Area: Choose a State

Cancer: Choose a Cancer Site

Generate Profile

Comparison Tables

Rate/Trend Comparisons
set higher priority for cancer control when rates are high or rising
learn more...

- by State/County prioritize cancer sites
- by Cancer prioritize states or counties in a state

Death Rates
for states or for counties in a state
learn more...

Incidence Rates
for states with high quality cancer registries
learn more...

Interactive Graphs and Maps

5-Year Rate Changes
in cancer mortality or incidence for all major cancer sites by user selectable criteria
learn more...

Historical Trends
compare trends in cancer mortality and incidence by user selectable criteria
learn more...

Latest Rates, Percents, and Counts
explore relationships across geography of mortality, incidence, demographics, or risk factors
learn more...

Support Data

Screening and Risk Factors
prevalence percents by state from behavioral surveys
learn more...

Peer Counties
identify counties that are comparable based on a user specified criteria
learn more...

Age Distribution
male and female population sizes by age groups

Cancer Control PLANET Home

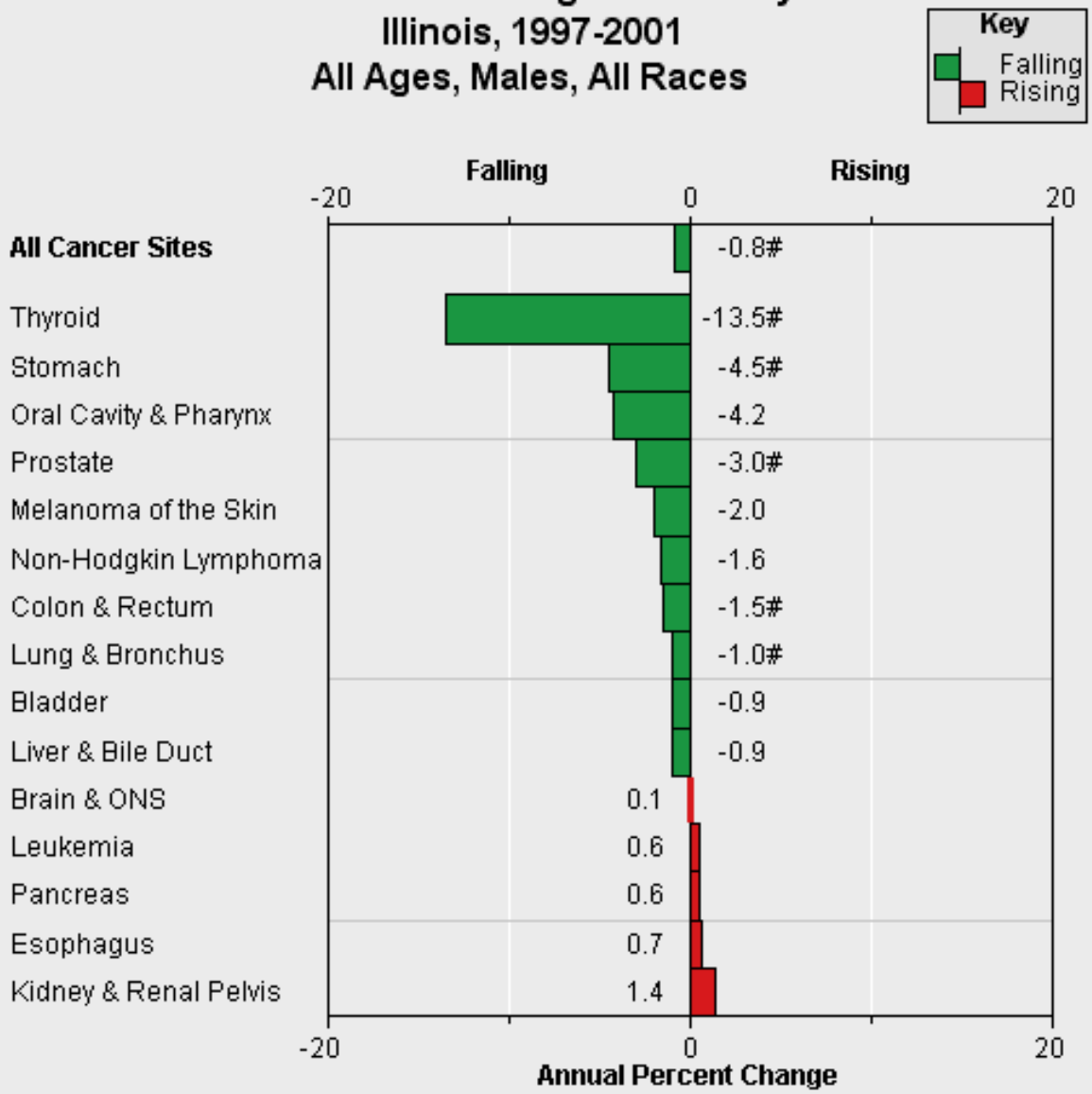
Help & About

- About this Site
- Quick Reference Guides
- Tutorials
- Interpret Rankings
- Low Vision/Accessibility
- Note: This Web site is best viewed in Internet Explorer (version 5.0 or higher) or Netscape (version 7.0 or higher) at a screen resolution of 1024 by 768 or more.

Links

- State Registry Contacts
- US Cancer Statistics: 2000 Incidence
- Resources for Cancer Control: Cancercontrolplanet.cancer.gov
- Cancer Progress Report 2001
- Annual Report to the Nation
- CDC's National Program of Cancer Registries
- NCI's SEER - Surveillance, Epidemiology, and End Results

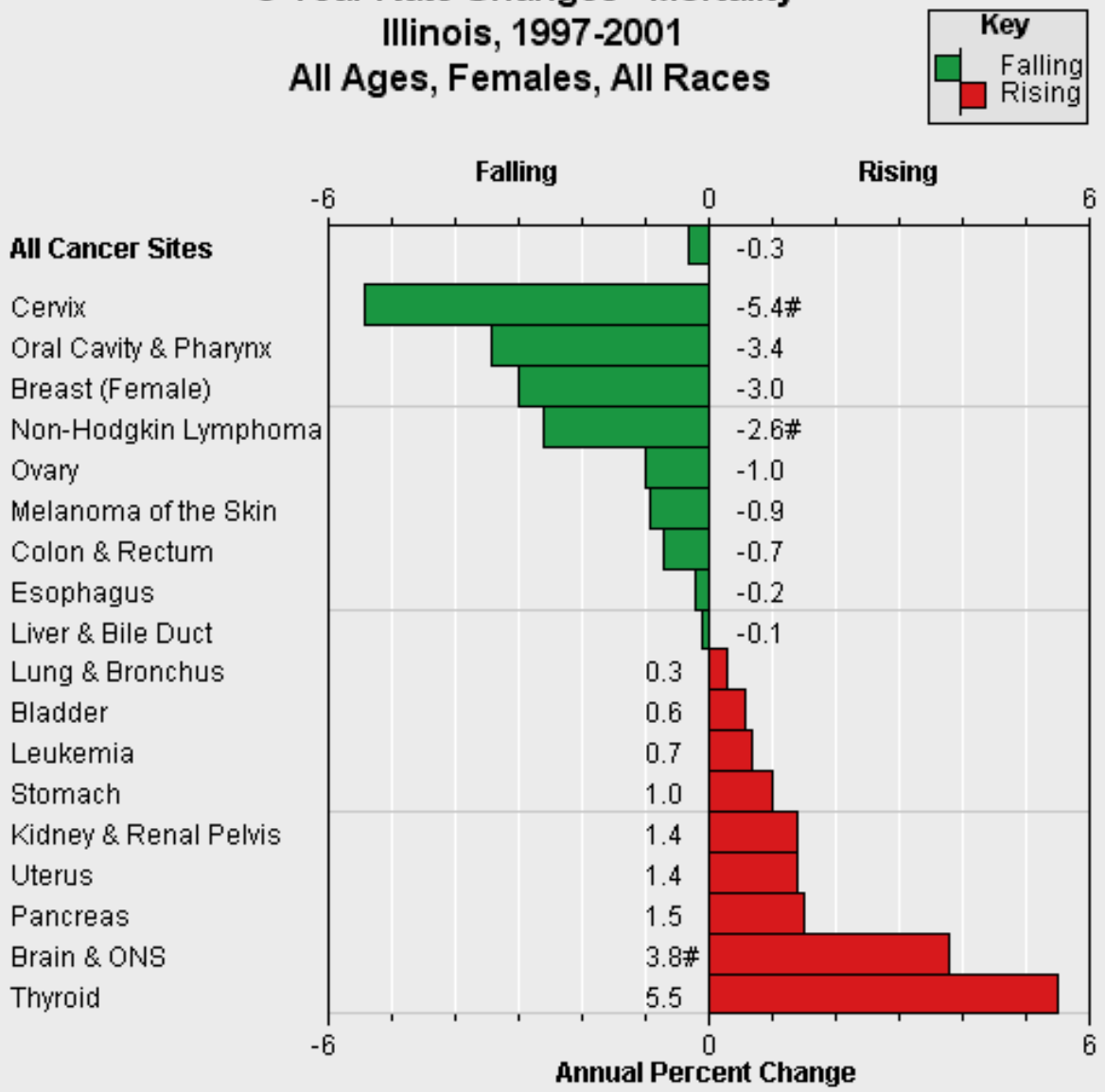
5-Year Rate Changes - Mortality
Illinois, 1997-2001
All Ages, Males, All Races



Created by statecancerprofiles.cancer.gov on 09/02/2004 12:44 pm.
Annual Percent Change (APC) over the 5-year period calculated by SEER*Stat.
Source: Death data provided by National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates are age-adjusted to the 2000 US standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by NCI.

- The annual percent change is significantly different from zero (p<0.05).

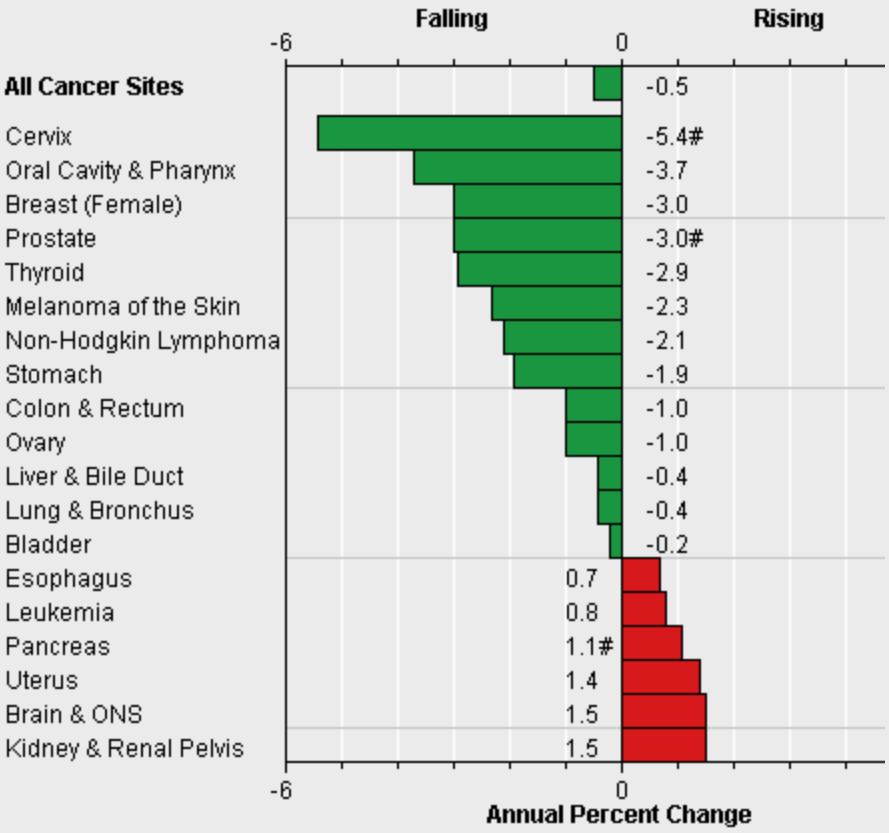
5-Year Rate Changes - Mortality
Illinois, 1997-2001
All Ages, Females, All Races



Created by statecancerprofiles.cancer.gov on 09/02/2004 12:45 pm.
Annual Percent Change (APC) over the 5-year period calculated by SEER*Stat.
Source: Death data provided by National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates are age-adjusted to the 2000 US standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by NCI.

- The annual percent change is significantly different from zero (p<0.05).

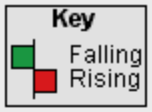
5-Year Rate Changes - Mortality
Illinois, 1997-2001
All Ages, Both Sexes, All Races

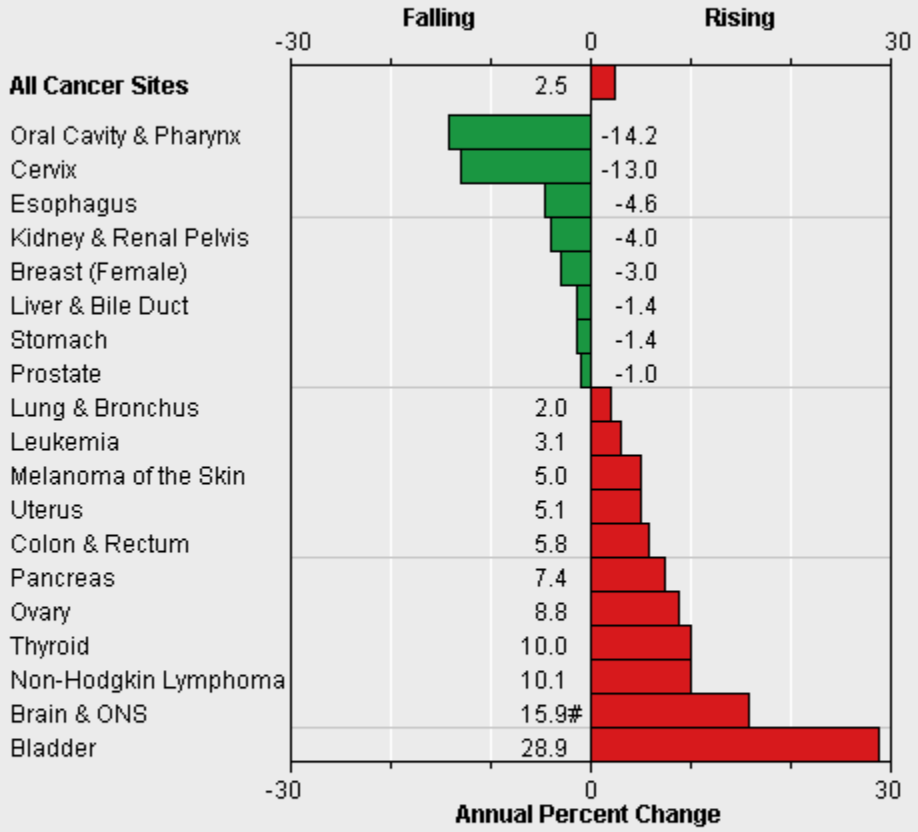


Created by statecancerprofiles.cancer.gov on 09/02/2004 12:49 pm.
Annual Percent Change (APC) over the 5-year period calculated by SEER*Stat.
Source: Death data provided by National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates are age-adjusted to the 2000 US standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by NCI.

- The annual percent change is significantly different from zero (p<0.05).

5-Year Rate Changes - Mortality
Illinois, 1997-2001
All Ages, Both Sexes, Hispanic





Created by statecancerprofiles.cancer.gov on 09/02/2004 12:51 pm.
Annual Percent Change (APC) over the 5-year period calculated by SEER*Stat.
Note: Statistics for minorities may be affected by misclasification of race on death certificates and on cancer case reports. Population counts used as denominators are bridged by NCHS from Census 2000's 31 race categories.
Source: Death data provided by National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER*Stat. Death rates are age-adjusted to the 2000 US standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by NCI.

- The annual percent change is significantly different from zero (p<0.05).

So what is the story?

- More progress in men than women?
- Some populations making good progress, others making less progress and/or falling behind?

What are the implications for moving data into action?

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"Not everything that can be counted counts, and not everything that counts can be counted."

- Albert Einstein (1879-1955)

Source: Harvard Report on Cancer Prevention, Cancer Causes and Control, November/December, 1996

What else do we need to know to motivate action?

"Cancer statistics are people with the tears wiped away."

-*Irv Selikoff*

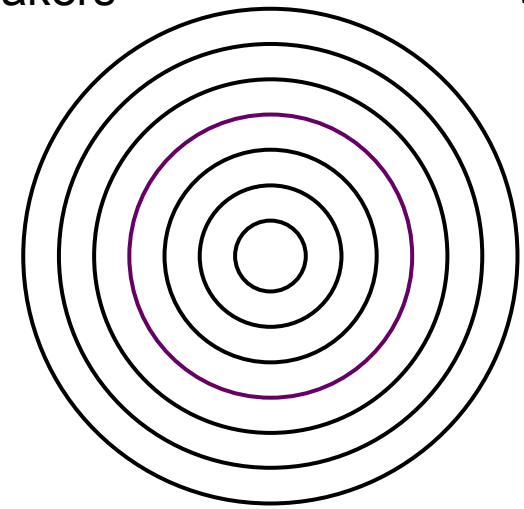
Why did Joanne die?

Models for Systems Change

- Circles of Influence/Circles of Impact

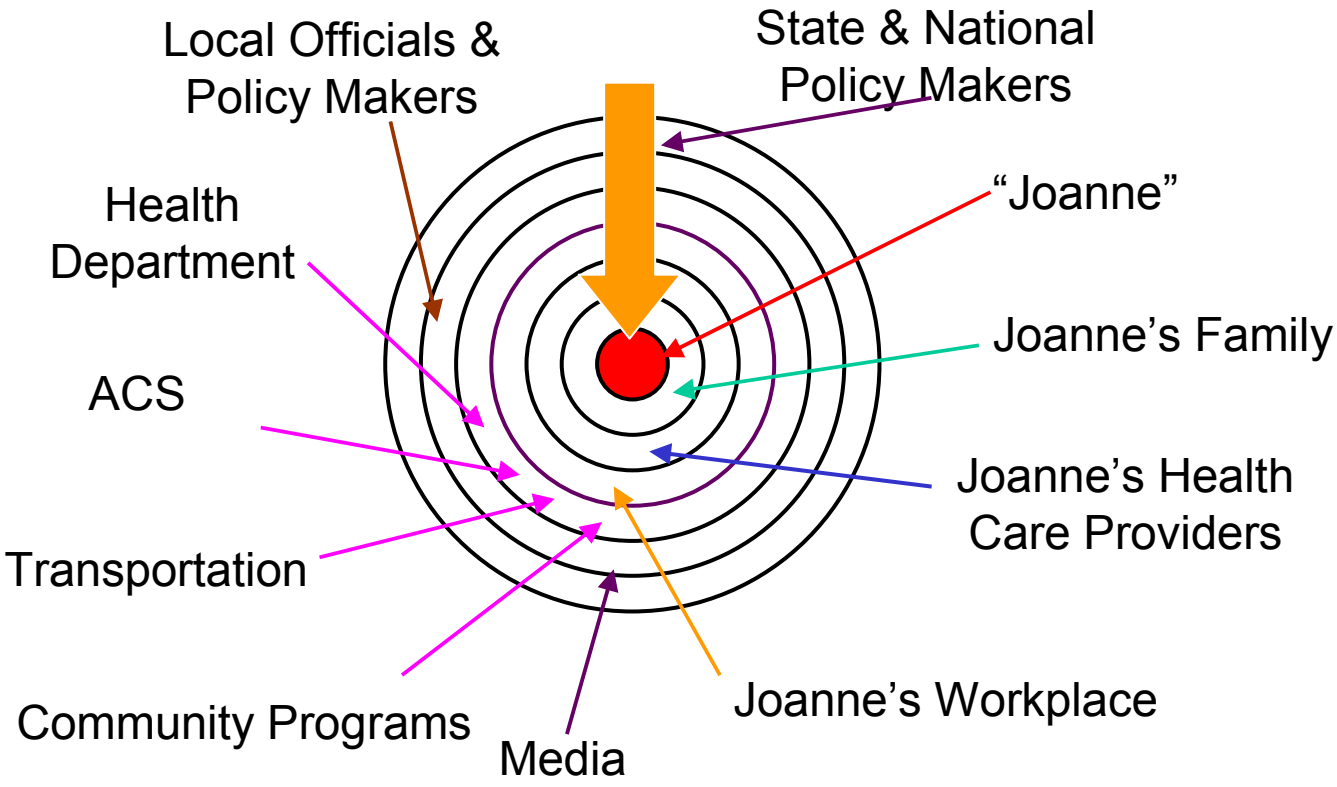
Source: M Peck ScD, UNMC

So Many Forces Influence Her Life …and Death



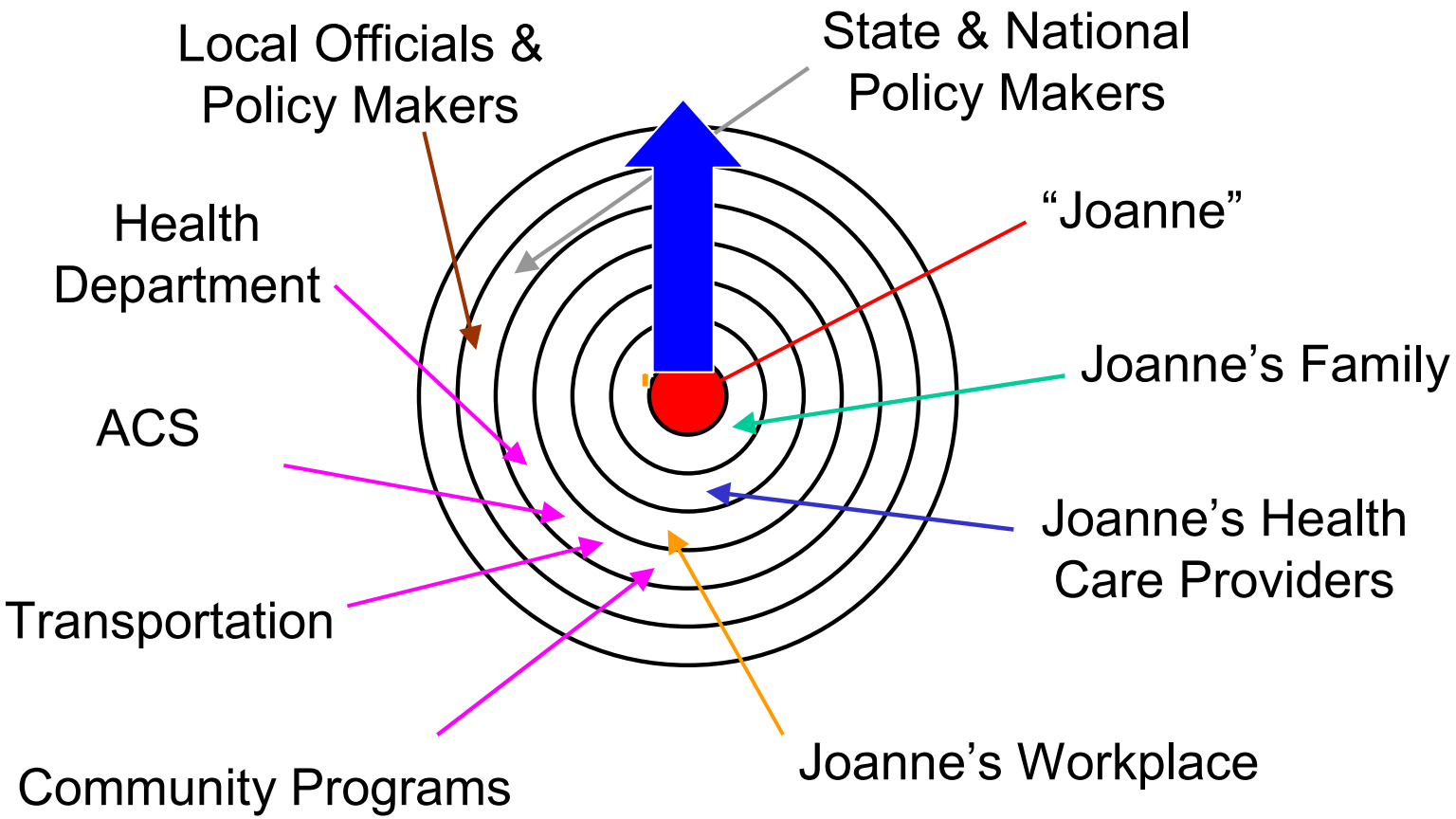
Source: M Peck ScD, UNMC

Circles of Influence



Source: M Peck ScD, UNMC

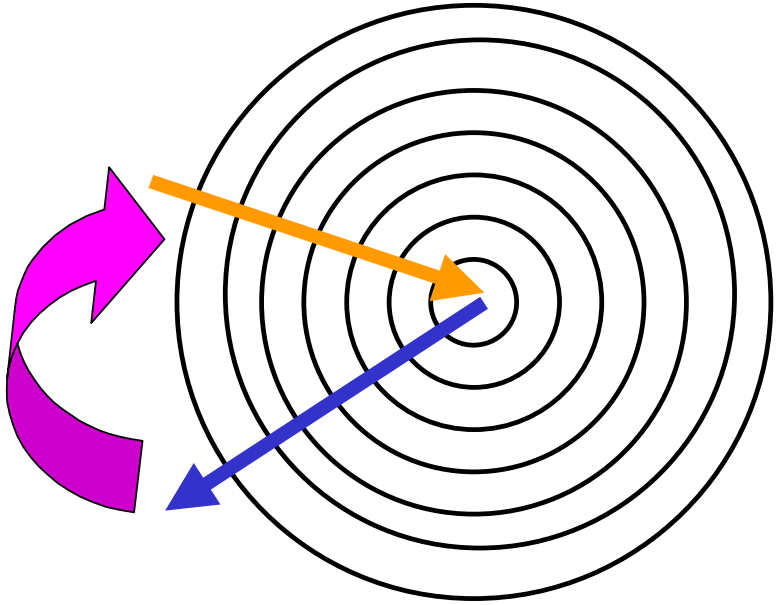
Circles of Impact



Source: M Peck ScD, UNMC

When "Joanne" dies…

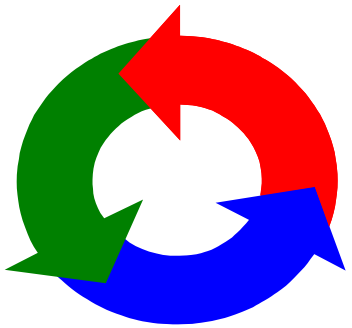
Circles of Influence, Circles of Impact



Source: M Peck ScD, UNMC

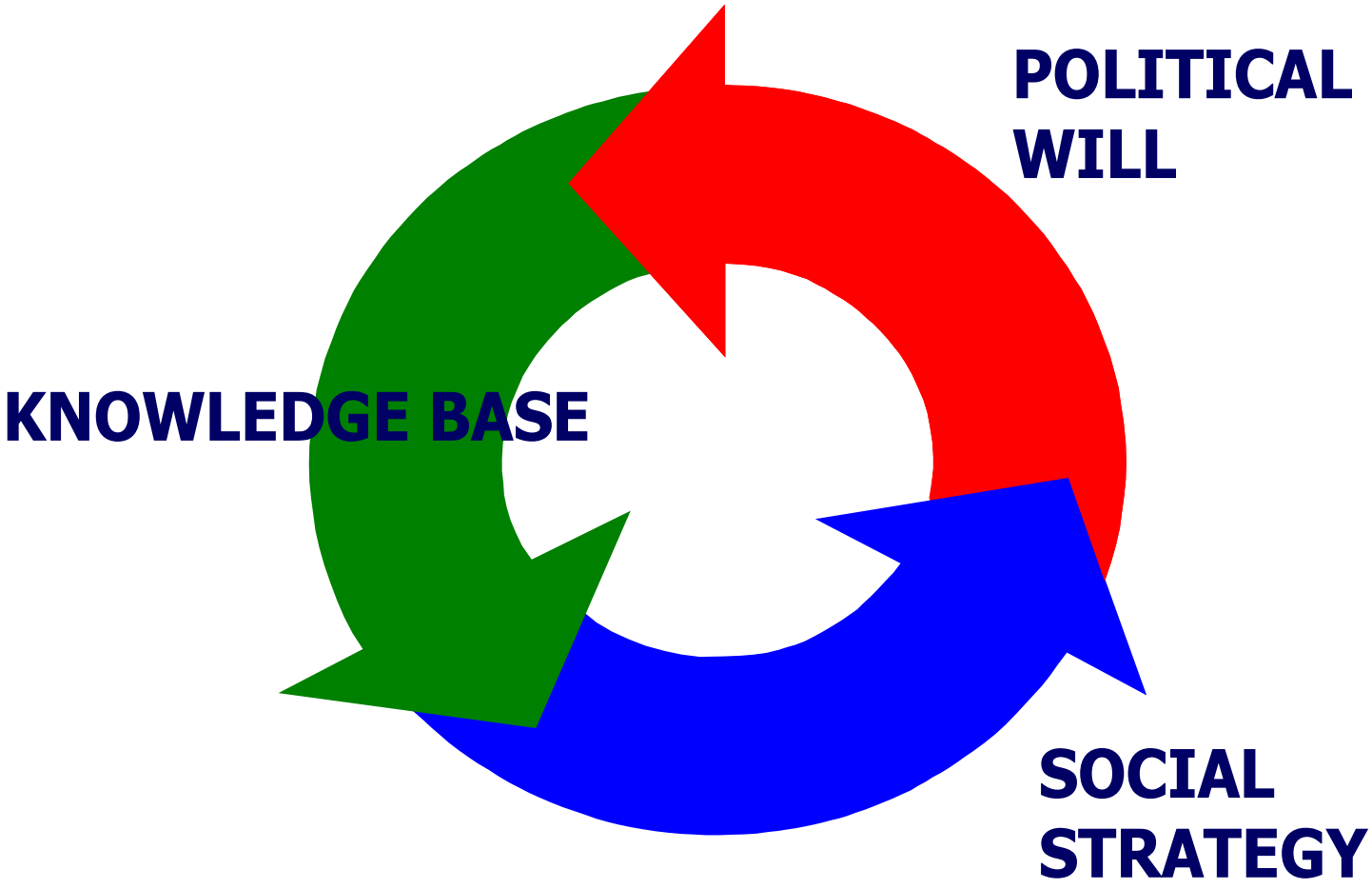
Models for System Change

- Circles of Influence/Circles of Impact
- **Effective Policy Development**



Source: M Peck ScD, UNMC

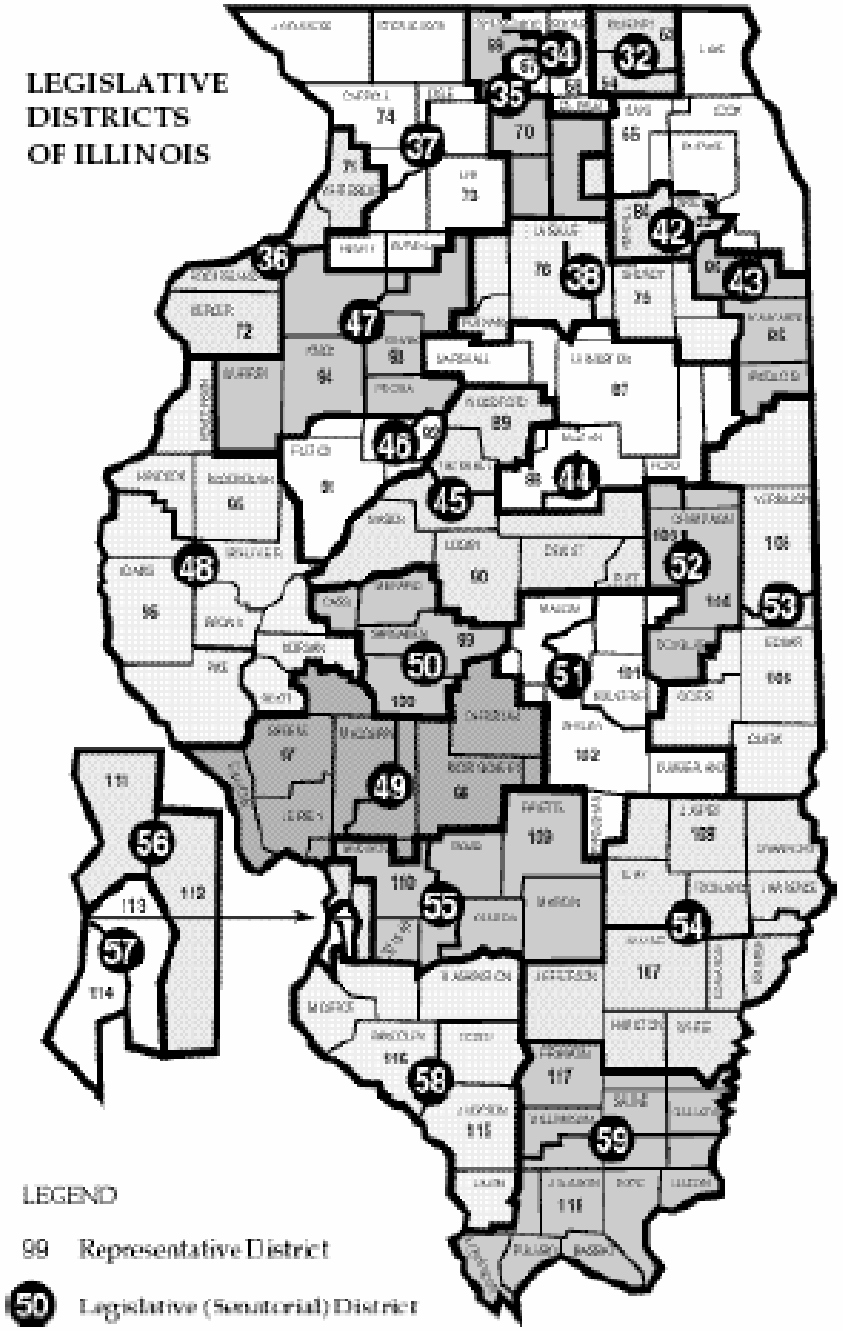
Research to Practice = Ideas into *Action*



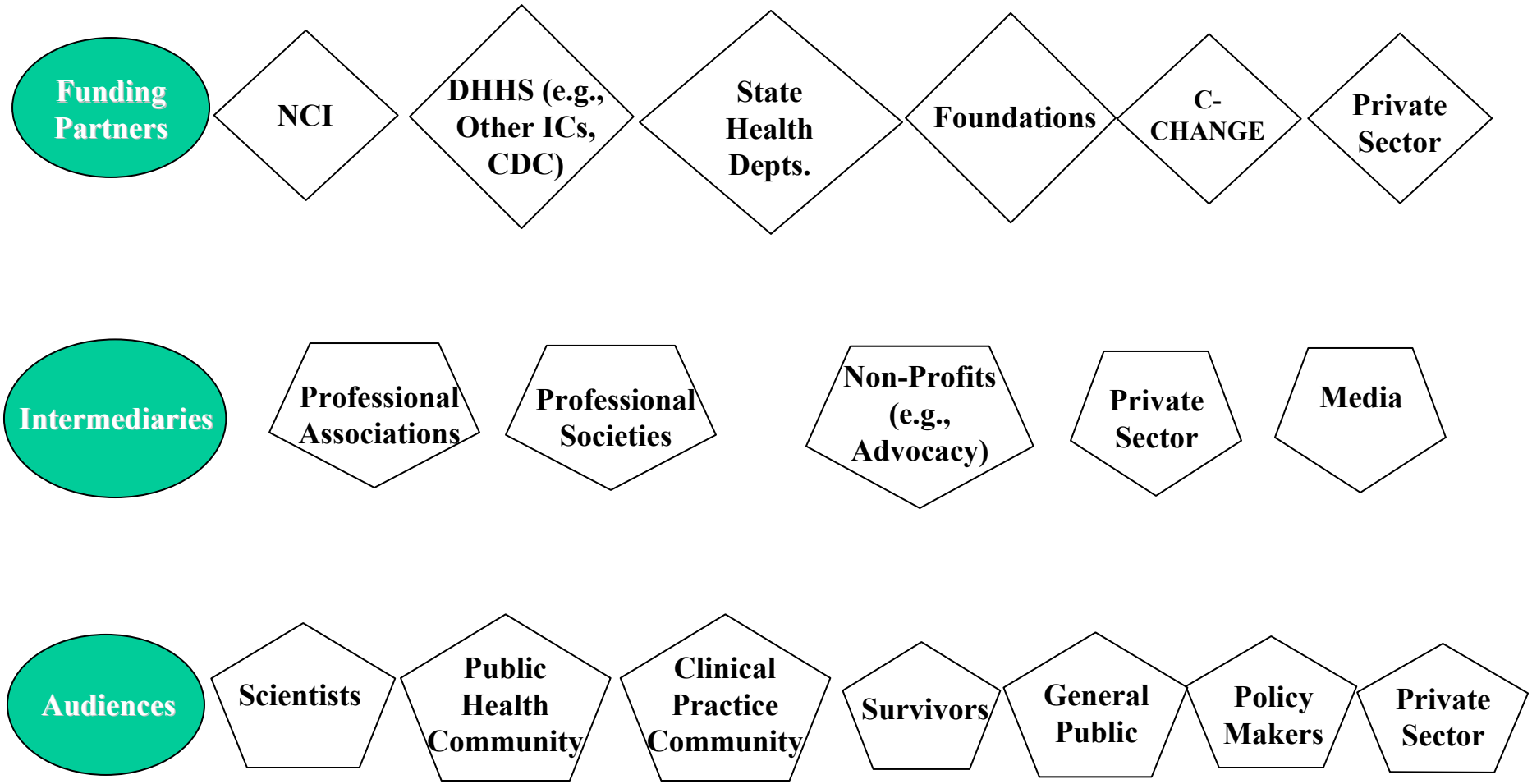
Source: M Peck ScD, UNMC, adapted from J Richmond


Wisconsin
Iowa
Missouri
Indiana
Kentucky
Jo Daviess
Stephenson
Winnebago
Boone
McHenry
Lake
Carroll
Ogle
DeKalb
Kane
DuPg.
Cook
Whiteside
Lee
Kendall
Will
Rock Island
Henry
Bureau
LaSalle
Grundy
Mercer
Putnam
Kankakee
Henderson
Warren
Knox
Strk.
Marshll.
Livingston
Peoria
Woodford
Iroquois
Hancock
McDonough
Fulton
Tazewell
McLean
Ford
Schuyler
Mason
Logan
DeWitt
Champaign
Vermilion
Adams
Brown
Cass
Menard
Piatt
Macon
Douglas
Edgar
Morgan
Sangamon
Moultr.
Pike
Scott
Christian
Coles
Greene
Macoupin
Montgomery
Shelby
Cumberland
Clark
Calhoun
Jersey
Fayette
Effingham
Jasper
Crawford
Madison
Bond
Clay
Richland
Lawrence
Marion
Clinton
St. Clair
Washington
Jefferson
Wayne
Wabash
Edwards
Monroe
Randolph
Perry
Franklin
Hamilton
White
Jackson
Williamson
Saline
Gallatin
Union
Johnson
Pope
Hardin
Massac
Alexander
Pulaski

Linking the Circles of Influence with the Circles of Impact: Map Illinois cancer mortality data by state election districts?



Proposed Framework For Epidemiology & Surveillance Dissemination Activities



Our goal is to turn knowledge into applications that benefit people.

"To him who devotes his life to science, nothing can give more happiness than increasing the number of discoveries, but his cup of joy is full when the results of his studies immediately find practical applications."

~Louis Pasteur

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